

## ABSTRACT

A solid-state color image pickup apparatus comprises a solid-state image pickup device 2 which is provided with a color separation filter having one arrangement pattern comprising four pixels adjoining vertically and horizontally, and comprising a whole-color-pass filter and a cyan-pass filter for the upper two pixels from the left, and a yellow-pass filter and a whole-color-pass filter for the lower two pixels from the left, and the pattern being repeated; a storage means 5 for capturing a chrominance signal outputted from each pixel and storing it; a correlation calculation means 6 for calculating the correlation between a target pixel to be interpolated, which is a cyan signal pixel or a yellow signal pixel stored in the storage means, and plural pixels in the vicinity of the target pixel; and an interpolation means 7 for performing interpolation in a direction where the correlation is relatively large, and calculating a whole-color-pass signal in the position of the target pixel.